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ABSTRACT

The study examined the increase of drinking from 1964 to 1975 among teenagers enrolled in two high schools in different sociocultural rural areas of Mississippi. The sample was composed of students in two high schools located in a "wet" county and a "dry" county. A questionnaire was administered to 525 students in 1964 and 793 in 1975. Both years, participation was voluntary and respondents completed the questionnaire in small groups of 25 to 40. The dependent variable, "drinker", was considered to be a regular user of alcoholic beverages. Three types of independent variables were used to measure the amount of change by social categories of adolescent drinkers: socio-demographic factors (sex, race, age, and socioeconomic status), religiosity, and parental and peer influences. Findings included: 60% of the respondents in 1975 were classified as "drinkers" compared to 37.5% in 1964, an increase of 22.5%; increase in the proportion of drinkers occurred by sex, race, age, socioeconomic status, religious behavior, parental attitudes, and peer influence; the largest increases were for whites, males, and those in the youngest age group; and religious attitudes and peer influence remained very good predictors of adolescent drinking. (Author/NQ)

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ADOLESCENT DRINKING IN TWO RURAL AREAS OF MISSISSIPPI: 1964 AND 1975*

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ABSTRACT

ADOLESCENT DRINKING IN TWO RURAL AREAS OF MISSISSIPPI:
1964 AND 1975.

Significant changes in the proportion of high school students who drink have taken place over the last eleven years in two Mississippi communities. Before 1966, only beer was available legally in the state and this was subject to local option. One of the communities studied is represented by the same high school studied in 1964 and is in a "wet" county as it was in 1964. The high school studied in 1975 represents a community twenty-five miles from the one studied in 1964, and is in a "dry" county as was the one studied in 1964.

Overall, sixty percent of 793 adolescents in 1975 were classified as "drinkers" compared to 37.5 percent of 525 adolescents in 1964, an increase of 22.5 percent. Increase in the proportion of drinkers occurred by sex, race, age, socio-economic status, religious behavior, parental attitudes and peer influence. The largest increases came for whites, males and those in the youngest age group. Religious attitudes and peer influence remained very good predictors of adolescent drinking. On the basis of changes which have occurred in these areas over the last eleven years, the proposition is suggested that "increases in adolescent drinking in the future will be the greatest and will occur for those groups which are now characterized by a more conservative life style."

Introduction

Data from national surveys on the drinking of alcoholic beverages indicate that a large majority of high school students drink, varying from 71 to 92 percent of the population in this age level. This proportion is larger than the approximate 58 percent of adults age 21 and over who drink (Second Special Report to the U. S. Congress on Alcohol and Health, 1974). The national study reported at least six relationships between social factors and drinking. One, males were more likely to drink than females. Two, whites were more likely to drink than blacks. Three, the percentage of drinkers increased considerably from the ninth to the twelfth grade for both males and females. Four, church attenders of conservative Protestant denominations were less likely to drink than those who were of more liberal Protestant denominations and/or Catholics. Five, especially relevant to this paper, rural individuals were less likely to drink than urban individuals. And six, individuals who lived in the East South Central region of the U. S. consumed the lowest amount of absolute alcohol as measured by gallons per capita (1.81 gallons) compared to the Pacific (3.1 gallons) and the Northeast (3.00 gallons). (Second Special Report to the U. S. Congress on Alcohol and Health, 1974).

Since 1940 the State of Mississippi has undergone a real transformation from a predominantly rural society to a more urban society but is still characterized by many rural attitudes and behavior. In 1940, the state was 64.1 percent "rural farm." In 1970, the state was only 9.5 percent "rural farm" (El Attar, 1974). "Rural non-farm" increased the most, an increase of 29.9 percent from 16.1 percent of the population in 1940 to 46.0 percent of the population in 1970 (El Attar, 1974). The proportion of those individuals in the state who were classified as

"urban" increased to 44.5 percent in 1970 from a rather low 19.8 percent in 1940. However, Mississippi was one of only six states in the contiguous U. S. that was less than 50 percent "urban" in 1970. (U. S. Bureau of the Census, 1971). With this type of change occurring, the state was experiencing part of the whole process of change in the style of life from gemeinschaft type of communities and role relationships which typify a rural society to the gesellschaft type of communities and role relationships which characterize a modern-industrial region or society. Thus, the kind of values and beliefs that will be emphasized more over time, and has been on the national level, are individualism and the independence of the individual. This individualism is seen in greater freedom of the adolescent and especially in the kind of norms which they hold and will try to carry out in their behavior. Their behavior should reflect what they interpret as important and prevelant in adult society. That is, the adolescent will model his or her behavior after those of adults in our society and will do this intentionally and non-intentionally as proto-adult behavior. The type of proto-adult behavior focused upon in this paper was the drinking of alcoholic beverages by adolescents.

The purpose of this paper was to examine the increase of drinking from 1964 to 1975 among teenagers enrolled in two high schools in different sociocultural rural areas. Secondly, several predictions concerning future increases of drinking among the teenage drinking population will be made based on the changes which have occurred over the eleven-year period.

The Communities

Since the initial study was done on high school students in Mississippi in 1964 was reported by Globetti (1964) and Windham, et. al. (1967), the proportion of students in the high schools in the two communities who can be considered regular users of alcoholic beverages increased substantially. The analysis in this paper was concerned with students in two high schools located in two different sociocultural areas of Mississippi. One high school was located in the Western part of the state in the center of an agricultural region referred to as the Delta. The Delta is characterized by its extremely flat and very fertile land. The Delta was and primarily still is, devoted to cotton which is carried out as plantation operations. The high school in the Delta which was studied in 1975 was the same one studied in 1964. This community and high school will be referred to in the paper as "Delta". The other high school is located in the northeastern section of the state. The area there is characterized by rolling hills, poorer and smaller owner-operated farms. This community and high school will be referred to as "Hill". The high school studied in 1975 is located 25 miles from the one studied in 1964.

One important difference between the two areas, as represented by students in the high schools, relates to the availability of alcoholic beverages in the two communities. In Delta, distilled spirits, beer and wine are available to individuals of legal age. In Hill the county is completely dry legally. In 1964, only beer was available in the state and this was subject to local option. Delta, 1964, had beer legally for sale, although distilled spirits were often available at the same places on the black market. Hill, 1964, was dry. The Hill of the 1975 study

is still legaliy completely dry. Overall, in contrasting the two types of communities, Delta has had a tradition of a more lenient attitude toward the sale and consumption of alcoholic beverages, while Hill has remained adamant against the sale and consumption of alcoholic beverages even after the local option law of 1966 made the sale of all three types of alcoholic beverages legal with local option.

Methods

Data that are presented concerning the 1964 study are derived from two papers: Most of the data are from Globetti (1964), but these data are supplemented by information from Windham, et al., (1967). The sample of the two high schools in 1964 was a random sample of names for the total list of students who were enrolled in the two schools. In 1964, there were 304 individuals in Delta and 221 in Hill. The sample of the two high schools in 1975 was part of a larger research project of 2,105 high school students in six Mississippi public school systems. In the 1975 study there were 478 respondents in Delta, while Hill had 315 respondents. The 1975 sample was based on a sampling of the total population of the school systems with participation averaging 70 percent or above in the two schools focused upon here. In both the 1964 and 1975 studies, participation in the research projects was voluntary and respondents completed the questionnaire in relatively small groups of 25 to 40.

The dependent variable, "drinker", was constructed the same in 1975 as in 1964. A drinker was considered to be a regular user of alcoholic beverages which meant that the respondent had to have had at least two or more drinks the previous year before the time the questionnaire was completed. Individuals who were not classified as "drinkers" and thus

were classified as "non-drinkers," were those who had tasted alcoholic beverages only once, those who had drunk alcoholic beverages in the past but quit a year before each of the studies were conducted and those individuals who abstained completely.

Three types of independent variables were used to measure the amount of change by social categories of adolescent drinkers from 1964 to 1975. First were those which measured socio-demographic factors such as the respondent's sex, race, age and socio-economic status. Second were those which measured the respondent's religiousity such as importance of religion and church attendance. Third were parental and peer influences which were measured by the parents' drinking behavior and the proportion of the friends in the respondent's peer network who drink alcoholic beverages.

Description

The mean age of the students in the 1964 sample was 15.744, while the mean age of the students in 1975 was 15.970. The 1964 sample was 40.4 percent black and 59.6 percent white while the 1975 sample was 44.9 percent black and 55.1 percent white. There was an increase in the proportion of blacks in Delta school, which accounted for the increase of blacks in the sample. The 1975 Hill sample contained fewer blacks and more whites than in 1964. Hill reflected the decreasing proportion of blacks in the state's population although Delta showed an increase in the proportion of blacks in the public school system as compared to 1964 Delta. This was probably due to the existence of a private school in Delta, but not in Hill. Overall, the counties in which the schools were located experienced a decrease in the proportion of blacks and an increase

in the proportion of whites.[1]

ANALYSIS

In 1964, the proportion of drinkers in the two high schools was 37.5 percent. In 1975, the proportion of drinkers in the two high schools had increased to 60.0 percent, an increase of 22.5 percent. See Table 1 and Table 10. Table 10 is a summary table of the increases across all the social categories which were examined. The amount of increase for adolescents was greater in Hill than in Delta, increases of 25.9 percent and 19.3 percent, respectively. However, the proportion of drinkers was significantly higher in Delta than in Hill in both 1964 and 1975. The difference between the proportion of drinkers between the communities was greater in 1964 than in 1975, differences of 23.5 percent and 16.9 percent, respectively. This phenomeron of a decreasing difference in the proportion of drinkers between the communities was consistent for the comparisons made except for a few variations that will be pointed out. That is, Delta continued to be higher on drinking than Hill, but the differential between the communities in the proportion of adolescent drinkers showed a decrease, and at the same time the differential within communities on social factors showed a decrease or convergence. In other words, drinking behavior increased for adolescents in two different sociocultural communities and showed a leveling effect between and within communities. It will be suggested that the influence of general factors relating to urbanization and modernization is thought to have caused this leveling effect in these two different types of communities.

Influence of Socio-Demographic Factors

Significant differences existed between the proportion of males and females who were drinkers in 1964 and in 1975. See Table 2. Males showed a 24.0 percent increase, from 48.0 percent being drinkers in 1964 to 72.0 percent being drinkers in 1975. Females increased almost as much as males, from 25.6 percent being drinkers in 1964 to 47.3 percent being drinkers in 1975, an increase of 21.7 percent. What was more interesting and important was that the males and females increased the most in Hill, 27.6 percent and 24.8 percent, respectively, compared to male and female increases in Delta of 20.4 percent and 18.8 percent, respectively. Part of the greater increase in Hill was due to the fact that this area was relatively lower in drinking in 1964 than was Delta. The fact that the proportion of drinkers in Delta was higher in 1964 means that the upper ceiling to which they could increase was more limited, while the amount adolescents could increase in Hill was greater.

Increases which occurred by race was similar to the increases that occurred by sex and community, but with some striking differences between the communities as represented by these adolescents. Whites had a much larger increase in the proportion of adolescents being drinkers than blacks, increasing from 35.1 percent drinkers in 1964 to 67.3 percent drinkers in 1975, an increase of 32.2 percent. Blacks increased from 41.0 percent being drinkers in 1964 to 51.1 percent drinkers in 1975, an increase of 10.1 percent. Overall, the difference between blacks and whites was not statistically significant in 1964 but it was in 1975. See Table 3. However, when examined by community in 1964, blacks and whites were significantly different in Delta but not in Hill. By 1975, blacks and whites differed significantly from one another in both communities,

with the differential between blacks and whites being larger in Delta--34.6 percent compared to a 22.4 percent difference in Hill. The proportion of white adolescent drinkers in Delta increased more than white adolescent drinkers in Hill, 50.7 percent to 29.1 percent, respectively. The proportion of black adolescent drinkers increased more in Hill than those in Delta, 13.7 percent to 5.1 percent increases, respectively. Regarding the proportion of individuals by race and community who were drinkers, the group with the highest proportion of drinkers were whites in the Delta, 85.7 percent, and the group with the lowest proportion of drinkers were blacks in Hill, 54.1 percent. Thus, overall and within communities, white adolescents experienced a greater increase in the proportion who were drinkers than blacks, especially white adolescent drinkers in Delta.

The third demographic variable on which there was comparative data available was the age of the respondent. The proportion of drinkers by age of the respondent revealed the largest overall change that occurred in the last 11 years. As can be seen in Table 4, the age group which increased the most were those age 13 to 14, increasing from 19.1 percent being drinkers in 1964 to 58.6 percent in 1975, an increase of 39.5 percent.[2] The increases in the proportion being drinkers for age 15 to 16 was 19.6 percent and for those age 17 and over it was 16.0 percent. In 1964 for the total sample, the smallest proportion of drinkers was in the age group 13 to 14 with the largest proportion of drinkers in the age group 17 and over. The intermediate group of drinkers were those age 15 to 16. However, by 1975 the differences between age groups leveled out and almost disappeared in Delta and decreased in Hill. In examining the increases in drinking by community, increases of 52.3 percent and

41.7 percent occurred for the age group 13 to 14 in Delta and Hill, respectively. Those age 13 to 14 in Delta increased in the proportion being drinkers from 25.5 percent to 77.8 percent in 1975, a very large increase. Individuals age 13 to 14 in Hill increased from 11.9 percent being drinkers to 55.6 percent in 1975. An increase of 36.4 percent occurred for those age 17 and over in Hill compared to a very small 2.8 percent increase for the same age group in Delta. The youngest adolescents increased the most in Delta while the youngest and oldest increased the most in Hill. Those age 13 to 14 in both Delta and Hill will soon be approaching the national norms of drinking.

The fourth demographic variable was the socio-economic status of the head of the household. In 1964, no difference existed between the social classes in the proportion of adolescents who were drinkers. These proportions varied from 36.6 percent being drinkers in the low social status to a 38.1 percent being drinkers in the high social status in 1964. See Table 5. By 1975, a differential had developed between members of different social statuses which was similar to national findings where higher social classes are more likely to drink than members of lower social statuses. In 1975, the proportion of those of low social status who were drinkers increased to 52.9 percent, an increase of 16.3 percent. Those of medium social status contained 59.3 percent drinkers and those of high social status contained 65.6 percent drinkers, increases of 21.5 percent and 27.5 percent, respectively. When examined by community for 1975 only, differentiation between the social statuses had taken place and the relationship is statistically significant in Delta, but not in Hill. This is very similar to the phenomenon which occurred by race where there were significant differences in 1964 in Delta, but

not in Hill. Differences by social status now exist in Delta and it appears the differences will probably develop in Hill coterminous with the decline of the tradition against drinking which is taking place.

These variables which measured background factors showed rather clearly the process of social differentiation of statuses which takes place between communities and within communities as they undergo the processes of urbanization and industrialization.

Influence of Religious Factors

Two measures of religiousity, one of attitudes and the other of religious behavior, show similar findings for the total sample and within each of the communities. The effect of religion is stronger in Hill both in 1964 and 1975, although its effect has decreased over the last eleven years in relation to drinking.

The measure of religious attitudes was the importance of religion to the respondent. See Table 6. There was a significant difference between individuals who believed that religion was important to them and those who believed religion was not important to them. This was true for the total sample and also within the two communities. The percent increase in drinkers for the total sample for those who thought religion was important and those who did not was very similar, 25.8 percent and 23.4 percent respectively. Of those who thought religion was important in 1975, 52.6 percent were drinkers compared to 29.2 percent in 1964. For those who ranked religion low, the percent who were drinkers in 1975 was 78.2 percent compared to 52.4 percent in 1964. The relationship held within each of the communities as well, but religion had more effect in Hill in decreasing the total proportion of drinkers. In Hill, of those who thought religion was important,

42.8 percent were drinkers compared to 66.2 percent who were drinkers of those who did not. This was contrasted to those in Delta who thought religion was important where 59.6 percent were drinkers as compared to 86.0 percent of those who did not think religion was important. What was interesting was that the size of the differential between the proportion of drinkers of those who thought religion was important and those who did not increased from 14.0 percent to 26.4 percent difference in Delta and decreased from 33 9 percent to 23.4 percent in Hill. This religious belief differentiates between drinkers and non-drinkers better in Delta than in Hill in 1975, but religious belief had a greater overall effect in depressing the absolute proportion of adolescent drinkers in Hill.

Approximately the same type of relationship found for religious attitudes was found when the proportion of drinkers was examined by religious behavior--mainly the respondent's church attendance. See Table 7. For 1975, the highest proportion of drinkers were found among those who are low on religious behavior--80.6 percent were drinkers compared to 65.3 percent of those who are medium and 40.9 percent for those who are high on religious behavior. These proportions represented increases of drinkers from 1964 for those high, medium and low on religious behavior of 18.6 percent, 31.5 percent and 28.2 percent, respectively. The same direction and approximately same size of increase in drinkers occurred within each of the communities, with the largest increase occurring for those who were medium in religious behavior. Religious behavior appears to have its greatest effect on decreasing the proportion of drinkers for those who are high on religious behavior and for those individuals who experienced the least increase. Those who were moderate

or low on religious behavior were closer to each other in the proportion of drinkers and percent increases than to those high on religious behavior.

When importance of religion is examined with religious behavior, it can be seen that the proportion of drinkers increased regardless of the degree of religiousity of the individual. If the effects of religion and religious belief continue to decline in the future as it has in the past, further large increases in drinking can be expected. This is especially true as secularization accompanies the transformation of rural areas.

Influence of Parents and Peers

The two best predictors of whether an adolescent was a drinker or not in these two studies was the drinking behavior of the parents and the drinking behavior of peers.

There has been a noticeable decline in the influence of parents on the drinking of adolescents.[3] See Table 8. As already stated, those individuals who showed larger increases in drinking were more conservative as measured by the social factors considered. The case was the same here. The percent of increase of drinkers was greater for those adolescents who have more conservative parents in relation to drinking--that is, parents who abstain. When both parents abstain, the proportion of drinkers increased from 45.6 percent in 1964 to 73.7 percent in 1975, an increase of 16.8 percent. The increases occurred in each community. In Delta, the increase was largest for adolescents whose parents abstain with an increase from 59.6 percent in 1964 to 84.4 percent in 1975, an increase of 24.8 percent. The increase was less for adolescents where one parent drank with an increase of 5.9 percent from 85.8 percent to 91.7 percent.

The 38.8 percent increase in the proportion of adolescent drinkers in Hill was slightly larger for those with parents where at least one drank as compared to those parents who abstain, 30.2 percent.

Whether or not one's peers drink was the best predictor of an adolescent being a drinker or not. See Table 9. For the total sample in 1975, when one's peers do not drink, 56.1 percent were drinkers compared to 96.4 percent who were drinkers when most of their peers drink. The amount of increase from 1964 to 1975 was about the same for those with drinking peers, 27.2 percent, compared to a 24.9 percent increase when most of the peers do not drink. When examined by community, the influence of peers in depressing the proportion of drinkers among adolescents was greatest in Hill. In Hill there was an increase of 18.4 percent from 19.6 percent being drinkers in 1964 to 38.0 percent being drinkers in 1975 when most of the adolescent's peers do not drink. This was compared to an increase again in Hill of 29.9 percent from 66.2 percent being drinkers to 94.1 percent when most of the adolescent's friends drink. The same pattern was followed in Delta with an increase of 22.5 percent when most of the adolescent's peers do not drink and an increase of 10.6 percent where most of the peers drink. In Delta, in 1975, when most of one's peers drink, 97.8 percent of these individuals were drinkers and 66.2 percent were drinkers when most of the peers do not drink. The fact is, Hill still had a lower proportion of drinkers even though 63.1 percent of the adolescents in Hill have a network of peers who drink. In Delta the proportion of the adolescents who have a network of friends who drink was 61.2 percent. The two networks of drinking peers in both communities was approximately equal, but drinking was much higher in Delta for those whose peer networks were characterized by drinking peers.

All in all whether one's peers drink or not was still very important in the drinking behavior of adolescents. Peer influence was part of the whole complex of factors relating to drinking which have been examined.

It appeared that the proportion of adolescents who drink or do not drink was part of the overall attitude and behavioral structure of each community. That is, if norms concerning drinking became more favorable on the community level as reflected by social class, religiousity, parental behavior and community sales of alcohol, then the type of influence by peers on one another was reflected in higher and lower proportions of adolescent drinkers. This was especially true for individuals with a network of primarily non-drinking peers. Delta had a traditionally more lenient attitude toward drinking as compared to Hill and more adolescents were drinkers in the Delta than in Hill regardless of peer network, but the peer networks were still effective in both areas. The peer relationships reflected these communal norms as did the parental drinking attitudes and behavior.

Summary

The proportion of adolescents who drank in two different, yet similar, social and cultural areas in Mississippi increased 22.5 percent over the eleven years from 1964 to 1975. The proportion of adolescents who were drinkers was not as high as national drinking levels. But Delta, with a tradition of greater use of alcoholic beverages than Hill, had a greater proportion of drinkers and was approaching these national levels. Essentially, the differences that existed in 1964 between the sexes, age groups, those with different degrees of religiousity, those who had parents who drink and don't drink and those who had peers who drink and don't

drink were similar to the differences found in 1975. The differences that were statistically significant in 1964 were significant in 1975.

Males were still more likely to be drinkers than females. Older adolescents were more likely to be drinkers than younger individuals but the greatest increase of drinkers occurred for those age 13 to 14. Individuals who thought religion was not important to them were more likely to be drinkers than those who thought religion was important. Individuals who were low on church attendance were more likely to be drinkers than those high on church attendance. When at least one parent drinks, the adolescent was more likely to be a drinker than when the parents abstain. And, when one's peers network was characterized by drinkers, the individual was more likely to drink than when one's peer network was characterized by non-drinkers.

Some changes other than just absolute increases in the proportion of drinkers in the population occurred. First, differences between blacks and whites in the proportion who were drinkers were greater in 1975 than in 1964 and the differences were statistically significant, with the differences being larger in Delta than Hill. Differences existed in Delta in 1964, but not in 1964 Hill by race. Differences now exist in both communities by race. Differentiation of drinkers by socio-economic status was not found in 1964 for the two communities. Differences did emerge for the total sample in 1975, but the relationship was significant only in Delta. However, differences by socio-economic status appeared to be developing in the same direction in Hill as in Delta. Overall, the increase in drinking was substantial considering the general sociocultural attitudes against drinking in Mississippi and especially in the Hill area of the state. Mississippi seems to be behind (or ahead

depending on one's perspective) in the proportion of adolescents who drink and the amount of drinking. However, the proportional increase that was reported here is probably as great or greater than anywhere else in the country.

Conclusions and Predictions

Increases in the proportion of adolescent drinkers for some of the social factors which have been discussed have portent for the future. The increase in drinkers among whites and young individuals age 13 to 14 was larger than other social groupings. See Table 10. Females increased proportionately as much as males. Increases of relatively the same size occurred for those low on religiousity as well as those high on religiousity. The proportional increases of drinking was essentially the same for those who had peers who drink as for those who do not. The increase was greater for those whose parents abstain than for those who have at least one parent who drinks.

These differential and equal increases over the eleven year period can be used to make predictions about drinking in the near future. The proportion of drinkers will continue to increase in the future because of the increase of drinking for those now 13 to 14. As young individuals becoming 13 continue to drink as much as their peers who preceeded them, further increases in drinking will continue for teenagers in Mississippi. The proportion of female drinkers will continue to increase as fast or faster than males. When the increasing proportion of males who drink peaks out, probably somewhere between 70 to 90 percent of their population in females will begin to close the differential between them. The same may occur for blacks in increasing and catching up with whites, but this

is by no means as sure as the other predictions. Blacks will probably be significantly lower than whites in drinking in the immediate future as adolescents.

It appears that adolescents in Delta are approaching the upper level of proportion of individuals who drink, especially for those age 13 to 14, those low on religion and those with parents and peers who drink. Hill is now at the point in drinking behavior where Delta was in 1964. This is also true in the amount parental influence in Hill in 1975 as compared to Delta, 1964. Also, peer influence in Hill appears to be approximately similar to the influence that peers held in Delta in 1964. Both the influence of parents and peers have declined over the eleven year period. If the trend continues, the influence of religion, parents, and peers may decline further in Delta in the next five to ten years. Thus, in another five to ten years, Hill will be approximating Delta's 1975 position on the proportion of drinkers, unless other factors intervene to increase or decrease the proportion of drinkers. Increases will continue to be greater in conservative groups and areas because they will be affected the most by changes.

Given the general direction of our society for more individual rights at all age levels, more and more independence will be characteristic of the teenager. This is occurring for the drinking of alcoholic beverages by adolscents. This is especially true for adolescents in communities or regions moving from a non-urban background and who are assimilating the values and norms of an urban society as carried by the systems of education, economy and the mass media. The changing focus of our value systems is shown in the drinking behavior of adolescents from a rural state which is involved in the process of moving from relative isolation

to modernization, urbanization and industrialization. The changes which will occur to this population will be greater over a shorter period of time because other individuals in other areas of our society have already undergone this process of change more slowly over a longer period of time and have been exposed to liberalizing factors longer.

TABLE 1

Percentage of Drinkers in 1964/1975 for Total Samples and By Community

	1964	1975
Total	37.5 (525)*	60.0 (793)
Delta	47.4 (304)	66.7 (478)
Hill	23.9 (221)	49.8 (315)
	**X^2 = 29.852	X^2 = 21.888
	***P < .001	P <.001
	****Q = .481	Q = .335

*The percentage is based on the number enclosed in the parentheses to its right. Read as follows, 37.5% of 525 individuals were classified users of alcoholic beverages or "drinkers" in 1964. In 1975, 60.0% of 793 individuals were classified as drinkers. The rest of the percentages follow the same format unless specified otherwise.

**X^2 is the chi square statistic.

***P is the probability level.

****Q is Yule's Q and is used in 2 X 2 tables. Gamma (G) is used in those tables larger than 2 X 2.

The above notations hold for this table and all following tables unless specified otherwise.

TABLE 2

Percentage of Drinkers in 1964/1975 by Sex of Respondent
Controlled by Community

Sex	1964	1975
	Total	
Male	48.0 (279)	72.0 (410)
Female	25.6 (246)	47.3 (383)
	$X^2 = 28.027$	$X^2 = 49.294$
	$P < .001$	$P < .001$
	$Q = .457$	$Q = .482$
	Delta	
Male	57.0 (158)	77.4 (243)
Female	36.9 (146)	55.7 (235)
	$X^2 = 12.146$	$X^2 = 24.194$
	$P < .001$	$P < .001$
	$Q = .386$	$Q = .461$
	Hill	
Male	36.5 (121)	64.1 (167)
Female	9.0 (100)	33.8 (148)
	$X^2 = 39.284$	$X^2 = 27.593$
	$P < .001$	$P < .001$
	$Q = .806$	$Q = .555$

TABLE 3

Percentage of Drinkers in 1964/1975 by Race of Respondent
Controlled by Community

Race	1964	1975
	Total	
Black	41.0 (212)	51.1 (356)
White	35.1 (313)	67.3 (437)
	$X^2 = 1.871$	$X^2 = 20.665$
	P = N.S.*	P < .001
	Q = .125	Q = .326
	Delta	
Black	50.0 (148)	55.1 (296)
White	35.0 (156)	85.7 (182)
	$X^2 = 6.756$	$X^2 = 46.313$
	P = .009	P < .001
	Q = -.245	Q = .661
	Hill	
Black	18.0 (64)	31.7 (60)
White	25.0 (157)	54.1 (255)
	$X^2 = 0.948$	$X^2 = 8.915$
	P = N.S.	P = .003
	Q = .178	Q = .436

*N.S. means not statistically significant at the .05 level or less.

TABLE 4

Percentage of Drinkers in 1964/1975 by Ages of Respondent Controlled by Community

Age	1964	1975
	Total	
13-14	19.1 (89)	58.6 (87)
15-16	36.3 (283)	55.9 (422)
17+	50.3 (153)	66.3 (270)
	X^2 = 23.736	X^2 = 7.428
	P < .001	P = .024
	G = .621	G = .151
	C = .208	C = .097
	Delta	
13-14	25.5 (167)	77.8 (18)
15-16	46.1 (167)	67.5 (265)
17+	61.1 (90)	63.9 (183)
	X^2 = 13.553	X^2 = 1.699
	P = .001	P = N.S.
	G = .390	G = .060
	C = .207	C = .107
	Hill	
13-14	11.9 (42)	53.6 (69)
15-16	22.4 (116)	36.3 (157)
17+	34.9 (63)	71.3 (87)
	X^2 = 7.648	X^2 = 27.872
	P = .022	P < .001
	G = .372	G = .246
	C = .182	C = .286

TABLE 5

Percentage of Drinkers in 1964/1975 by Social Status of Respondent's Head of Household Controlled by Community For 1975 Only

Social Status*	1964	1975
	Total	
Low	36.6 (183)	52.9 (221)
Medium	37.8 (177)	59.3 (246)
High	38.1 (165)	65.6 (326)
	X^2 = 0.102	X^2 = 9.567
	P = N.S.	P = .008
	G = .023**	G = .182
	Delta	
Low	* * *	57.1 (133)
Medium		64.6 (161)
High		75.5 (184)
		X^2 = 12.275
		P = .002
		G = .273
	Hill	
Low	* * *	45.5 (88)
Medium		49.4 (85)
High		52.8 (142)
		X^2 = 1.186
		P = N.S.
		G = .101

*Social status for the 1964 study was an index constructed from a combination of occupation and educational level of family head. The 1975 study is based on the socio-economic index (SEI) of Duncan (1961) with an adaptation to the 1960 and 1970 censuses.

**G is the Goodman-Kruskal gamma.

*** Data were not available.

TABLE 6

Percentage of Drinkers in 1964/1975 by Importance of Religion of Respondents Controlled by Community

Importance of Religion*	1964		1975
		Total	
High Importance	29.2 (338)		52.6 (553)
Low Importance	52.4 (187)		78.2 (165)
	X^2 = 27.440		X^2 = 33.151
	P <.001		P < .001
	Q = .453		Q = .527
		Delta	
High Importance	42.1 (190)		59.6 (324)
Low Importance	56.1 (114)		86.0 (100)
	X^2 = 5.629		X^2 = 22.564
	P = .022		P < .001
	Q = .275		Q = .613
		Hill	
High Importance	12.8 (148)		42.8 (229)
Low Importance	46.7 (73)		66.2 (65)
	X^2 = 30.522		X^2 = 10.152
	P < .001		P = .001
	Q = .711		Q = .446

*Importance of Religion in 1964 study was based on two questions: "How important is religion to you?" and "What do you prefer to do on Sunday morning?" Importance of religion in 1975 was based only on "How important is religion to you?"

TABLE 7

Percentage of Drinkers in 1964/1975 by Religious Behavior of Respondents Controlled by Community

Religious Behavior*	1964		1975
		Total	
High	22.3 (134)		40.9 (225)
Medium	33.8 (204)		65.3 (441)
Low	52.4 (187)		80.6 (93)
	X^2 = 31.953		X^2 = 55.904
	P < .001		P < .001
	G = .408		G = .481
		Delta	
High	33.3 (51)		49.4 (85)
Medium	45.0 (120)		67.7 (291)
Low	54.9 (133)		87.0 (69)
	X^2 = 8.744		X^2 = 24.450
	P = .01		P < .001
	G = .259		G = .465
		Hill	
High	17.8 (73)		35.7 (140)
Medium	17.8 (84)		60.7 (150)
Low	46.3 (54)		62.5 (24)
	X^2 = 17.305		X^2 = 19.743
	P < .001		P < .001
	G = .414		G = .424

*Religious behavior in 1964 was based on frequency of church attendance, Sunday School attendance and whether they held office in Sunday School. Religious behavior in 1975 was based on frequency of church attendance.

TABLE 8

Percentage of Drinkers in 1964/1975 by Parental Drinking Behavior of Respondents Controlled by Community

Parental Drinking Behavior	1964		1975
		Total	
Both Abstain	45.6 (171)*		73.7 (247)*
At Least One Drinks	75.8 (157)		92.6 (188)
	$X^2 = 31.071$		$X^2 = 24.318$
	$P < .001$		$P < .001$
	$Q = .578$		$Q = .632$
		Delta	
Both Abstain	59.6 (89)		84.4 (135)
At Least One Drinks	85.8 (106)		91.7 (109)
	$X^2 = 17.313$		$X^2 = 2.340$
	$P < .001$		$P < .001$
	$Q = .609$		$Q = .344$
		Hill	
Both Abstain	30.5 (82)		60.7 (112)
At Least One Drinks	54.9 (51)		93.7 (79)
	$X^2 = 7.823$		$X^2 = 24.680$
	$P = .005$		$P < .001$
	$Q = .470$		$Q = .811$

*The base N in this Table and Table 9 for both the 1964 and the 1965 sample consisted only of individuals who were drinkers and complete abstainers.

TABLE 9

Percentage of Drinkers in 1964/1975 by Peer Drinking Behavior Controlled by Community

Peer Drinking Behavior	1964		1975
		Total	
Non-Drinking Peers*	28.9 (83)*		56.1 (221)*
Drinking Peers	71.5 (242)		96.4 (359)
	$X^2 = 46.916$		$X^2 = 141.733$
	$P < .001$		$P < .001$
	$Q = .721$		$Q = .908$
		Delta	
Non-Drinking Peers	43.7 (32)		66.2 (142)
Drinking Peers	87.2 (149)		97.8 (224)
	$X^2 = 30.658$		$X^2 = 67.420$
	$P < .001$		$P < .001$
	$Q = .796$		$Q = .914$
		Hill	
Non-Drinking Peers	19.6 (51)		38.0 (79)
Drinking Peers	66.2 (65)		94.1 (135)
	$X^2 = 24.951$		$X^2 = 77.418$
	$P < .001$		$P < .001$
	$Q = .778$		$Q = .926$

*In 1964, non-drinking peers were abstainers. However in 1975, only six percent of the sample had a network of friends that abstained completely. As a result, in 1975, "Non-drinking Peers" were those who had a network of friends of whom less than one-half drank. "Drinking Peers" consisted of a network where one-half or more of their friends drank.

TABLE 10

Summary: Percentage Increase of Drinkers From 1964 to 1975 For Variables in Tables 1-9 by Total Sample Controlled by Community

Variables		Percent Increase		
		Delta	Hill	Total
Total (1)*		19.3	25.9	22.5
Sex:	Male	20.4	27.6	24.0
(2)	Female	18.8	24.8	21.7
Race:	Black	5.1	13.7	10.1
(3)	White	50.7	29.1	32.2
Age:	13-14	52.3	41.7	39.5
(4)	15-16	21.4	13.9	19.6
	17+	2.8	36.4	16.0
Social Status:	Low	**	**	16.3
(5)	Middle			21.5
	High			27.5
Religion's	High	17.5	30.0	23.4
Importance (6)	Low	29.9	19.5	25.8
Religious	High	16.1	17.9	18.6
Behavior	Moderate	22.7	42.9	31.5
(7)	Low	32.1	16.2	28.2
Parental	Abstains	24.8	30.2	28.1
Drinking (8)	One Drinks	5.9	38.8	16.8
Friend's	Most Drink	10.6	27.9	24.9
Drinking (9)	Less one-half Drink	22.5	18.4	27.2

*This number enclosed in parentheses is the table number from the percent increase was obtained.

**Information for comparison by community was not available.

FOOTNOTES

[1]The racial composition for Delta county in 1960 was 31.7 percent white and 68.3 percent black. In 1970, Delta county was 35.2 percent white and 64.8 percent black. The Hill county of the 1964 study in 1960 was 74.7 percent white and 25.3 percent black. The Hill county of the 1964 study in 1970 was 79.2 percent white and 20.8 percent black. The Hill county of the 1975 study was 82.5 percent white and 17.5 percent black. The Hill county of the 1975 study in 1970 was 84.5 percent white and 15.5 percent black. (Source: Peden, et al, 1974:45-49).

[2]The reader is reminded that the summary table of increases in the proportion of drinkers for the variables in Tables 1 through 9 is found in Table 10.

[3]The reader should note that the construction of the dependent variable for parents' and peers' drinking behavior contained only "drinkers" and complete "abstainers" in order that the 1975 data would be comparable for these two variables with the 1964 data. The number of drinkers does not change, only a decrease in the number of non-drinkers--those who had tasted alcoholic beverages only once and those who had drunk, but stopped. This inflates the proportion of drinkers, but does not change the rate of increase over time. Also, the relationships were examined for the 1975 data using the total number of cases for "drinker" and "non-drinker" and the relationships were statistically significant and in the same direction.

REFERENCES

Duncan, Otis Dudley.
1961 Ch. II "A Socioeconomic Index For All Occupations," and Ch. VII, "Properties and Characteristics of the Socio-economic Index," pp. 109-161: Albert J. Reiss, Jr., with Otis Dudley Duncan, Paul N. Hatt and Cecil C. North. Occupations and Social Status. New York: The Free Press.

El Attar, M. E.
1974 Some Aspects of Population Dynamics in Mississippi. Mississippi Agricultural and Forestry Experiment Station, Mississippi State University, (August).

Globetti, Gerald.
1964 A Survey of Teenage Drinking in Two Mississippi Communities. Preliminary Report No. 3. Social Science Research Center, Mississippi State University, October.

Peden, Guy T., Gaines M. Rogers, and Jon C. Stuart (eds.)
1974 Mississippi Statistical Abstract 1974. Division of Research, College of Business and Industry, Mississippi State University, Mississippi State, Mississippi.

Second Special Report to the U.S. Congress on Alcohol and Health.
1974 from the Secretary of Health, Education and Welfare. (HEW Pulbication No. 017-024-00399) Washington, D.C.: U. S. Government Printing Office.

U. S. Bureau of the Census.
1971 Statistical Abstract of the U.S.: 1971. (42 edition) Washington, D.C.: U. S. Government Printing Office.

Windham, Gerald O., James D. Preston and Harold B. Armstrong.
1967 "The High School Student in Mississippi: and Beverage Alcohol." Journal of Alcohol Education, Volume 13, Number 1 (Spring) 1-12.